Texas Department of Health
RABIES PREVENTION - 1997

These recommendations are adapted from those issued by the Immunization Practices Advisory Committee(ACIP) on Rabies Prevention (MMWR January 8, 1999;48: No. RR-1) and subsequent modifications as newer information has become available. They reflect the current status of rabies and antirabies biologicals in Texas.

For assistance on problems or questions about rabies prophylaxis, call your local health department, a regional office of the Texas Department of Health (TDH), or the Bureau of Communicable Disease Control (512-458-7455) during working hours. For assistance on problems or questions about rabies in animals, call your local health department, a regional office of the Texas Department of Health (please see section beginning on page 33 for details), or the Zoonosis Control Division (512-458-7255) during working hours. For emergency consultations on nights, weekends, and holidays call (512-458-7111). The latest update of this document is available in Adobe Acrobat® format via the TDH homepage at:

http://www.tdh.state.tx.us/rabies/rabies97.htm

INTRODUCTION

Although rabies rarely affects humans in the United States, every year many persons receive postexposure rabies prophylaxis (PEP). It is estimated that in Texas 800 persons were begun on PEP during 1997. Appropriate management of those who may have been exposed to rabies infection depends on the evaluation of the risk of infection (type of exposure, location of wound, rabies vaccination status of biting animal, etc.) and the efficacy and risk of prophylactic treatment. All available methods of systemic prophylactic treatment are complicated by instances of adverse reactions. These are rarely severe. Decisions on management must be made immediately; the longer treatment is postponed, the less likely it is to be effective. The urgency for treatment must be tempered by recognition that human rabies is an extremely rare event in Texas and that hasty decisions have led to the inappropriate vaccination of people who were not at risk for infection.

Data on the efficacy of active and passive immunization after rabies exposure have come from both human and animal studies. Evidence from laboratory and field experience in many areas of the world indicates that PEP, combining local wound treatment, vaccine, and rabies immune globulin, is uniformly effective when appropriately used. Rabies has not occurred in persons who have received prompt PEP

following the guidelines found in this manual.

Since the mid 1900s, the number of human cases has declined significantly in the United States. This is probably due to several factors. Improved domestic animal control (including effective leash laws, domestic animal rabies vaccination programs, and stray animal collection) has been a major factor. For the six years from 1990 through 1995, 1.2 percent of the dogs tested for rabies in Texas were rabid (294 of 24,128). During this same period, only 0.5 percent of the cats tested were rabid (119 of 21,975). Before the implementation of improved animal control measures, rabid domestic animals were the most common source of human rabies in Texas. Rabid domestic animals are still the leading source of human rabies in many parts of the world.

The low level of rabies in domestic animals has been maintained even though two major rabies epizootics currently exist in Texas. The aggressive use of oral rabies vaccine bait drops for coyotes and foxes, which began in selected strategic areas of Texas during 1995, will hopefully greatly decrease the risk of domestic animals and humans becoming rabies infected via these wildlife species.

Rabies continues to be enzootic in skunks, although the number and percentage of rabies positive skunks tested has dropped in recent years. In 1990, 25% (117/467) of the skunks tested in Texas were positive for rabies compared with 14% (69/503) in 1995.

The other major rabies enzootic is found in bats. In the United States, several human rabies cases with no history of animal bites of any kind have been identified as being due to a bat strain of rabies virus. This has led to a less stringent determination of exposure for this mammal:

> *...in situations in which a bat is physically present and the person(s) cannot reasonably exclude the possibility of a bite exposure, post exposure prophylaxis should be given unless prompt capture and testing of the bat has excluded rabies virus infection.* (MMWR 1996; 45:209)